



"Your Personal Contractor for Life"

September 21, 2009

State Buildings Code Council

Re: Sprinkler Systems

Dear Council;

In 2008 Senger Construction, LLC built a 1.8 million dollar vacation home for a client in the Suncadia Resort located in Cle Elum, Washington where fire sprinkler systems are required in every home by covenant. The home was completed just prior to the Central Washington Home Builders Association's Tour of Homes in September and was featured in that tour. The Owner did not occupy the home immediately, In January of 2009 we experienced an extreme cold snap during which the home experienced a furnace failure and since the home was unoccupied the furnace issue went unnoticed for some time. As a result all water and sprinkler lines and all of the plumbing fixtures were frozen solid.

This client was extremely fortunate as the pipes burst in the garage and when that occurred water started to flow in the garage at the break causing the fire alarm to go off alerting us to the issue in the home so we could get the main turned off in a timely fashion. This saved massive damage to the floor coverings, cabinets, drywall and insulation. As fortunate as they were, every ceiling in this brand new home had to be removed so the entire sprinkler system could be replaced. Every single piece of PVC pipe had been broken or cracked due to the freezing. We had to replace the insulation and drywall and repaint the entire interior of the home.

The total cost of this repair from the failed fire sprinkler system was in excess of \$80,000.00. Of this total, the repair to the failed portion of the plumbing system was barely over \$1,000.00. I have included a copy of the cost breakdown for this repair so you can see the direct costs involved in this repair.

Requiring sprinkler systems in all homes by code adds another substantial layer of cost to homes in an already burdened industry. The cost of the system is just the tip of the iceberg; additional fees for permitting, inspection, engineering, water hook ups, and tax's. What are we going to require in rural areas that utilize exempt wells for their water including many that are low flow and will not sustain a fire sprinkler load? What new storage regulations will be placed on them?

PO Box 730 Cle Elum, WA 98922 (509) 674-7774 (800) 820-2449

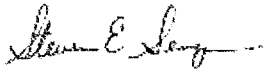
Web Site: <http://www.washington-home-builder.com> E-mail: [Steve@stevesenger.com](mailto:Steve@stevesenger.com)

By Referral Only™  
SENCECL954CC

I have been a home builder for 34 years and during that time changes in construction technology and improved building code requirements (electrical and smoke alarm systems) have resulted in a dramatic drop in fatal home fires, especially when you factor in the significant population growth and increase in housing stock. This tells me that new homes are safer than ever before and this would be yet one more cost to be placed on backs of home buyers already strained financially to purchase a home.

Fire sprinklers should be a voluntary choice left to the consumer/homebuyers and not mandated by government.

Sincerely,

A handwritten signature in cursive script, appearing to read "Steven E. Senger".

Steven E. Senger

**PROJECT TOTALS REPORT**

Between the Contractor:

**Senger Construction, LLC  
PO Box 730  
Cle Elum, Washington 98922  
United States  
SENGECL954CC  
509-674-7774**

And the Client:

**For the Project:**

**Wong Freeze Repair**

Project Address: Cle Elum WA 98922  
Development: Suncadia Resort  
Lot Number: Rope Rider,  
Directions to Jobsite: Enter through main Suncadia entry. Turn Right on Coal Mine Way. House is down the hill on the right

#### **NOTES:**

- 1.1. The house completely froze as a result of the furnace exhaust freezing and restricting the airflow causing the furnace to turn off damaging both the plumbing and fire sprinkler systems. Simultaneously a freak weather event caused the roof to leak due to extreme rain on ice dams causing water to back up under the flashings. These were cleaned off the roof by our crew so the damage was minimal.
- 1.2. Plumbing system was repaired as required. System was PEX so damage was valves mostly.
- 1.3. The entire frozen and damaged CPVC sprinkler system was removed from the house as well as the majority of the ceiling drywall and the insulation.
- 1.4. All of the finishes in the \$1,800,000.00 home needed to be protected from the demolition.
- 1.5. The sprinkler system will be replaced
- 1.6. The insulation will be replaced
- 1.7. The drywall will be replaced, taped, finished, textured and PVA'd
- 1.8. All new finishes will be repainted to match existing, essentially the majority of the home.
- 1.9. Damaged hardwood will be removed and replaced as required
- 1.10. Damaged Glu Lam beams will be puttied, sanded and refinished
- 1.11. Complete clean up including shampoo carpets, stairs, wash windows, clean all millwork and cabinets.
- 1.12. Hauling and dump fees

#### **PLANNING**

Permits - Allowance	\$500.00
<b>SUBTOTAL PLANNING</b>	<b>\$500.00</b>
<b>DEMOLITION</b>	
Demolition Labor - Remove drywall, sprinklers and insulation	\$8,875.00
Demolition Removal – Dumpster, dump fees, masking and protection of finishes	\$2,300.00
<b>SUBTOTAL DEMOLITION</b>	<b>\$11,175.00</b>
<b>ELECTRICAL SYSTEMS</b>	
Electrical Labor – Remove and replace all interior Lighting fixtures	\$1,020.00
<b>SUBTOTAL ELECTRICAL SYSTEMS</b>	<b>\$1,020.00</b>
<b>PLUMBING SYSTEMS</b>	
Plumbing Repair – Replace burst valves and fixtures	\$1,052.29
Fire Sprinkler System – complete removal and replacement	\$16,668.00
<b>SUBTOTAL PLUMBING SYSTEMS</b>	<b>\$17,720.29</b>
<b>INSULATION &amp; DRYWALL</b>	
Insulation – As required	\$3,056.00
Drywall Replacement – Tape, texture and PVA to match existing	\$12,800.00
<b>SUBTOTAL INSULATION &amp; DRYWALL</b>	<b>\$15,856.00</b>
<b>INTERIOR TRIM &amp; STAIRS</b>	
Interior Trim Labor – Remove and replace beam trims	\$640.00
<b>SUBTOTAL INTERIOR TRIM &amp; STAIRS</b>	<b>\$640.00</b>
<b>FLOOR COVERING</b>	
Hardwood Flooring Labor – Remove and replace as required	\$450.00
Hardwood Flooring Materials	\$125.00
<b>SUBTOTAL FLOORCOVERING</b>	<b>\$575.00</b>
<b>INTERIOR FINISHES</b>	
Interior Paint – Match existing	\$7,250.00
Putty Sand and Refinish Beams damaged by water	\$725.00
<b>SUBTOTAL INTERIOR FINISHES</b>	<b>\$7,975.00</b>
<b>CONSTRUCTION CLEAN UP</b>	
Clean Up – Daily – Protection and cleanup debris	\$800.00
Clean Up – Final – windows, shampoo carpets, windows	\$1,700.00
<b>SUBTOTAL CONSTRUCTION CLEAN UP</b>	<b>\$2,500.00</b>
<b>PROJECT INSURANCE</b>	

Builder's Risk Insurance	\$1,000.00
<b>SUBTOTAL PROJECT INSURANCE</b>	<b>\$1,000.00</b>

<b>MISCELLANEOUS</b>	
Rental Equipment – Scaffolding and carpet fans	\$864.00
<b>SUBTOTAL MISCELLANEOUS</b>	<b>\$864.00</b>

<b>COMPANY OVERHEAD &amp; MARGIN</b>	
Company Overhead 10%	\$7,669.91
Company Margin 10%	\$7,669.91
Supervision 2%	\$1,533.98
<b>SUBTOTAL COMPANY OVERHEAD &amp; MARGIN</b>	<b>\$16,873.80</b>

<b>Grand Total</b>	<b>\$76,699.09</b>
<b>State Sales Tax 8%</b>	<b>6,135.93</b>
<b>Total Cost of Repairs</b>	<b>82,835.02</b>